

and veil of pentaacts, the two former features not being so plainly visible from one and the same aspect.

*Fig. 2.* Pentactine spicule (pleural prosthelia),  $\times 68$ .

*Fig. 3.* Autogastral diact,  $\times 225$ .

*Fig. 4.* Large discoctaster,  $\times 300$ .

*Fig. 5.* Small discoctaster,  $\times 300$ .

*Fig. 6.* Oxyhexaster,  $\times 300$ .

LVIII.—*On a new Genus and Species of Vespertilionine Bat from East Africa.* By OLDFIELD THOMAS.

HARDLY had my description of *Scotæcus Hindei*\* been published than the Museum received from Dr. Hinde a second new bat, so distinct from all previously known as to require the formation of a new genus for its reception.

It is the analogue of the South-American *Histiopus* in Africa, and may be called by a name having a similar meaning to that word—

LÆPHOTIS †, gen. nov.

Most nearly allied to *Vespertilio*, but the ear and tragus enlarged as in *Histiopus*.

Skull, as compared with that of the allied form, long and narrow, flattened above, very smooth and little ridged, the crests scarcely perceptible. Palate narrow, its posterior part unusually produced backward. Bullæ rather large.

Dental formula as in *Vespertilio*.

Upper incisors close to canines, instead of being well separated from them, the tip of the lower canine biting on to the top of, or outside, the outer incisor, instead of between it and the upper canine. In correlation with this the lower canine is unusually short and feeble, its length from cingulum to tip not exceeding the outer horizontal length of *m*.<sup>1</sup>. Detailed proportions of teeth as described below.

*Type* and only species

*Læphotis Wintoni*, sp. n.

Size rather less than in *Histiopus velatus*; general appearance very much as in that species, although the ears are not so large. Fur close and fine, the hairs of the back about 6–7 millim. in length. General colour above coppery brown, the basal halves of the hairs sooty, the terminal halves clear

\* Ann. & Mag. Nat. Hist. (7) vii. p. 263 (1901).

† *λαίφος*, a sail.

coppery or cinnamon (Dr. Hinde speaks of the colour as "bronze"). Under surface paler brown, the tips of the hairs becoming almost white in the pubic region.

Fur above not extending on to arms or wing-membranes, though there are a few fine hairs on the thumbs; but the legs are clothed as far as the knee, the backs of the feet are finely hairy, and the basal half of the interfemoral is thinly covered with fine and inconspicuous hairs. Below the wing-membranes are finely clothed nearly as far outwards as a line from the elbow to the knee, but the interfemoral membrane is more nearly naked than above. No trace of an interfemoral fringe.

Ears large, much larger than in *Vespertilio*, but not so large as in *Plecotus*, *Otonycteris*, or *Histiotus*; not connected across the forehead with each other. Inner margin with a distinct basal fold, ending below in a narrow lobe; its basal third is strongly convex forward, so that the basal line is at right angles to the upper two thirds, which are very slightly convex and pass gradually into the rounded tip; outer margin nearly straight above, slightly convex below; antitragus low, half-oval, marked by a distinct notch behind. Tragus unfortunately damaged in the type on both sides, but enough is left to show that it is long, broad at base, with a slightly concave inner margin and a broadly rounded tip.

Wings of normal Vespertilionine proportions, the metacarpals of the third, fourth, and fifth digits approximately equal in length. Insertion of wing-membrane at base of the digits, so far as can be made out in the dry skin. Calcar reaching about halfway towards the tip of the tail; post-calcaneal lobule present, but very narrow. Tip of fourth finger T-shaped, or even slightly spatulate. Membranes and ears uniformly brownish grey, except that the wing-membrane from the tip of the fifth finger to the ankle is edged with whitish.

Skull very thin and papery, long and narrow, low, smooth, and scarcely ridged at all. Nasal notch comparatively shallow. Intertemporal region not strongly constricted, the intertemporal but little less than the interorbital breadth. Palatal notch penetrating to the level of the middle of the canines. Palate narrow, the greatest breadth across the outer corners of  $m.^2$  going nearly three times in the total length of the skull; its posterior part produced behind the molars a distance equal to the combined lengths of  $p.^4$  and  $m.^1$ .

Upper incisors slightly convergent, of about the same relative proportions as in the Serotine, the inner one long, with a secondary postero-external cusp near its tip and a small

postero-internal cingular cusp at its base; outer incisor quite small, its main cusp about half the height of the inner incisor, also with a small internal basal cusp. Large premolar pressed close up against the back of the canine; last upper molar triangular, with a well-developed posterior lobe, in correspondence with which the talon of the last lower molar is large and tricuspid. Lower incisors trifold, overlapping; anterior lower premolar about one half the height and one fourth the area in cross-section of the posterior one.

Dimensions of the type (measured in skin):—

Forearm 37 millim.

Head and body (approximate) 50; ear (dry and no doubt contracted) 21; tragus, length on inner edge 6·3, breadth basally 3·5; metacarpus of third finger 3·5; first phalanx 13; tibia 13·5; hind foot, s. u. 7, c. u. 7·7; calcar (c.) 15.

Skull: greatest length 15·7; basipalatal length in middle line 12·8; interorbital breadth 5; intertemporal breadth 3·6; breadth of brain-case 7·8; palate length 6·6. Front of lower canine to back of  $m_3$  5·6.

*Hab.* Kitui, British East Africa. Altitude about 3500 feet.

*Type.* Male. Original number 64. Collected 7th January, 1901, by Dr. S. L. Hinde.

I have ventured to name this interesting bat in honour of my friend Mr. W. E. de Winton, to whose labours on the small mammals of Africa all naturalists, and I especially, have been so constantly indebted for assistance.

In working out *Læphotis* I have had occasion to investigate the question as to the generic separation of the Serotine group from the other species of *Vespertilio*, as advocated in Prof. Méhely's admirable work on the bats of Hungary. No doubt the species examined by him, *V. murinus* and *Nilssoni* on the one hand and *V. serotinus* on the other, are fairly far apart; but in my opinion the exotic species seem to render the separation of "*Eptesicus*" from the rest quite impossible, such species as *V. megalurus*, *Innesi*, *capensis*, and *minutus* by no means falling naturally into one or other of the two groups. The characters drawn by Prof. Méhely from the cranial crests, the shape of the tragus, and the insertion of the wing-membranes do not by any means run parallel throughout the series, and I am convinced that it is better for the present not to recognize *Eptesicus* as distinct from *Vespertilio*.